IN THE UNITED STATES DISTRICT COURT FOR THE MIDDLE DISTRICT OF NORTH CAROLINA Case No.: 1:19-cv-272-LCB-LPA

MAXWELL KADEL, et al.,)
Plaintiffs; v.)
)
DALE FOLWELL, in his official)
capacity as State Treasurer of North)
Carolina, et al,)
)
Defendants.)

Declaration of
Patrick W. Lappert, MD
Board Certified in Surgery and Plastic Surgery
Decatur, AL 35603

Knowledge Training and Experience:

1. Education and Training: I received my Bachelor of Arts in Biological Sciences at the University of California, Santa Barbara, 1979. There I was engaged in research in cell membrane physiology with Dr. Philip C. Laris, studying stoichiometry of the sodium: potassium ATPase pump. I received my M.D., Doctor of Medicine degree at the Uniformed Services University of the Health Sciences, 1983 at Bethesda, Md. I served my General Surgery Residency at the Naval Hospital Oakland/ UC Davis East Bay Consortium, 1987-1991 and served as Chief Resident, Department of Surgery, Naval Hospital Oakland, 1990-1991. I also served a Plastic Surgery Residency at the University of Tennessee- Memphis, 1992-1994. My

professional background, experience, and publications are described in more detail in my curriculum vitae. An updated copy of my CV is attached as Exhibit A to this declaration.

- 2. **Board Certifications in Medicine**: I have been Board Certified in Surgery (American Board of Surgery, 1992), in Plastic Surgery (American Board of Plastic Surgery, 1997; American Board of Plastic Surgery, 2008).
- 3. **Medical Staff Appointments : I served as the** Staff General Surgeon at the Naval Hospital Oakland, CA 1991-1992 and as Associate Professor of Surgery, UC Davis-East Bay, 1991-1992. I also served as a Plastic and Reconstructive Surgeon, Naval Medical Center, Portsmouth, VA 1994-2002 and as Chairman, Department of Plastic and Reconstructive Surgery, Naval Hospital Portsmouth, VA 1996-2002. I later served as Clinical Assistant Professor, Department of Surgery, Uniformed Services University of the Health Sciences, 1995-2002 and as Founding Director, Pediatric Cleft Palate and Craniofacial Deformities Clinic, Naval Hospital Portsmouth, VA 1996-20002 also as the Founding Director, Wound Care Center, Naval Hospital Portsmouth, VA 1995-2002. I have also served as a Staff Plastic Surgeon in Nebraska, and Alabama.
- 4. **U.S. Surgeon General Service:** I served as a Specialty Leader, Plastic and Reconstructive Surgery, Office of the Surgeon General-USN, 1997-2002
- Faculty Appointments: I served as Teaching Faculty at Eastern Virginia Medical
 School, Division of Plastic Surgery, 1995-2002
- 6. **Military Service:** I served as an Aviation Officer Candidate, Naval Aviation Schools Command, NAS Pensacola, 1978 and was Commissioned an Ensign, MC, USNR 1979 and Commissioned as a Lieutenant, MC, USN 1983. I served as a Designated Naval Flight

Surgeon, Naval Aerospace Medical Institute, 1985 and was Assigned Marine Fighter/ Attack Squadron-451, serving as Flight Surgeon, and serving as Radar Intercept Officer in the Marine F-4S Phantom, accumulating 235 flight hours, and trained for qualification as an Air Combat Tactics Instructor. Deployed to the Western Pacific as UDP forward deployed fighter squadron in Korea, Japan, and the Philippines. I served in the US Navy for 24 years, served in the USMC for 3 years. I retired with the rank of Captain, USN in 2002

- 7. **Publications Peer Reviewed Medical Journals**: Lappert PW. Peritoneal Fluid in Human Acute Pancreatitis. Surgery. 1987 Sep;102(3):553-4; Toth B, Lappert P. Modified Skin Incisions for Mastectomy: The Need for Plastic Surgical Input in Preoperative Planning. J Plastic and Reconstructive Surgery. 1991; 87 (6): 1048-53; Lappert P. Patch Esophagoplasty. J Plastic and Reconstructive Surgery. 1993; 91 (5): 967-8; Smoot E C III, Bowen D G, Lappert P, Ruiz J A. Delayed development of an ectopic frontal sinus mucocele after pediatric cranial trauma. *J Craniofacial Surg.* 1995;6(4):327–331; Lappert PW. Scarless Fetal Skin Repair: "Unborn Patients" and "Fetal Material". J Plastic and Reconstructive Surgery. 1996 Nov;98(6):1125; Lappert PW, Lee JW. Treatment of an isolated outer table frontal sinus fracture using endoscopic reduction and fixation. P!astic and Reconstructive Surgery 1998;102(5):1642-5.
- 8. **Publications Medical Textbooks:** Wound Management in the Military. Lappert PW, Weiss DD, Eriksson E. Plastic Surgery: Indications, Operations, and Outcomes, Vol. 1; 53-63. Mosby. St. Louis, MO 2000
- 9. **Operations and Clinical Experience Consultations and Discussions :** As a physician and surgeon, I have treated many thousands of patients in 7 states and 4 foreign

nations. My practice has included Primary Care, Family Medicine, Aerospace Medicine, General Surgery, Reconstructive Surgery for combat injured, cancer reconstructive surgeries including extensive experience with microvascular surgery, Pediatric Congenital Deformity, and the care of chronic wounds. I have practiced in rural medicine, urban trauma centers, military field hospitals, university teaching hospitals, and as a solo private practitioner. In my private practice I have had occasion to treat many self-identified transgender patients for skin pathologies related to their use of high dose sex steroids, laser therapies for management of facial hair both in transitioners and detransitioners. I have performed breast reversal surgeries for detransitioning patients. My practice is rated as "LGBTQ friendly" on social media. I have consulted with families with children who are experiencing gender discordance. I have given many presentations to professional meetings of educators and counselors on the subject of transgender, and the present state of the science and treatment. I have discussed the scientific issues relevant to the case with many physicians and experts over a number of years and also discussed related issues with parents and others.

10. Retained as an Expert Witness - Compensation - Bases for Opinions: I have been retained as an expert witness by John G. Knepper, JD for the defense in connection with the Kadal, et al. vs. Folwell, et al litigation. I have actual knowledge of the matters stated in this declaration. I am being compensated at an hourly rate for actual time devoted, at the rate of \$400 per hour including report drafting, travel, testimony, and consultation. My compensation does not depend on the outcome of this litigation. I am paid in advance for all written opinions or testimony to avoid any conflict of interest. To formulate opinions in this case I have reviewed

many scientific publications, the plaintiff's medical records, the Complaint and Answer, and all expert witness declarations.

11. **Affirmation Treatments are Currently** *Experimental* — as they have not been competently tested, not proven effective, are not generally accepted by the relevant scientific community, and have no documented error rates: Patients who experience a gender identity that is discordant with biological sex have an alarmingly high incidence of serious psychosocial morbidity including depression, anxiety, eating disorders, substance abuse, HIV infection, suicidality, and homelessness [Connolly, M. D., M. J. Zervos, C. J. Barone, C. C. Johnson, and 2nd C. L. Joseph. 2016. "The Mental Health of Transgender Youth: Advances in Understanding." Journal of Adolescent Health 59:489–95. :10.1016/j.jadohealth.2016.06.012.]. While a need for effective treatment modalities is clear, there are currently significant deficiencies in our understanding the etiology of this condition, the risks and benefits of the current experimental (unproven, untested) medical interventions, and the long-term success of various affirmation experimental treatments in achieving the primary desired goal of reducing mental illness including reductions in suicide risk. Multiple recent studies and reviews including the recent national science summaries and guidelines from England-NICE, Sweden, Finland, the Cochrane Review, the British Royal College of Psychiatrists and others all document significant deficits in our current understanding of these complex disorders and signifigant defects in the existing science. As we strive to provide real, effective, and sustained treatment to patients who experience gender dysphoria within established ethical boundaries, it is essential that we properly and scientifically research the causes of gender dysphoria as well as conduct competent, properly conducted randomized clinical trials and long-term treatment

outcome studies. These basic, foundational tasks — the tasks that make experimental procedures actual, proven treatments worthy of trust — have <u>never been accomplished in the highly</u> controversial field of the <u>Transgender Treatment Industry</u>. Why? Suffering and vulnerable patients and their families continue to wait for this basic, foundational scientific work to be completed. Meanwhile, affirmation "treatments" must continue to be properly viewed as experimental.

The science and medical world have — in just the past few years — become increasingly aware of and deeply concerned about the glaring science and ethical defects of the Transgender Treatment Industry. For example, the very recently released 2020 Finland national science review and guidelines documented "a lack of quality evidence to support the use of hormonal interventions in adolescents with gender dysphoria.". The new strict Finnish guidance prioritizes psychological therapy over treatment with hormones or surgery thus directly contradicting the non-science-based association protocols of WPATH]. The 2020 Finland national science review and guidelines also document the ongoing lack of scientific basis for the Transgender Treatment Industry stating "Only limited research has been conducted on transgender identity and other gender identity conflicts, and comparative studies are very rare." In sum, the Finland National Science Review and Guidelines, like the new Sweden Review and Guidelines, and other reviews, and the collapse and recantation of the 2020 Branstrom long-term treatment outcome study claims under withering methodological criticisms, all appear contrary to the opinions of Drs Brown and Schechter and WPATH. See, e.g., https://genderreport.ca/finland-strict-guidelines-fortreating-gender-dysphoria/

Meanwhile, practitioners in this troubled field continue to offer defective research and politicized endorsements from politicized, union-like associations (WPATH, APA, ACP, etc) rather than competent, credible, valid and reliable, peer reviewed and published scientific evidence. As with the plaintiffs' experts in this case, they continue to refuse the serious defects and methodological limits of their data and experimental practices. 50 years of experimenting is enough! Its time for the Transgender Treatment Industry to come up with real, competently constructed scientific evidence that they are helping more people than they are hurting. As the recent recent national science reviews from England, Sweden, and Finland have all noted, its time to step back, slow down, and prudently investigate a range of approaches to vulnerable patients struggling with gender discordance issues.

12. My Opinions regarding the Plaintiff's Expert Reports in this Case by Drs Schechter and Brown:

As a physician and surgeon for decades, I have dedicated my life to helping the injured, the wounded, the sick, the vulnerable, and those in distress. As a physician and surgeon, I have a duty to carefully assess the available scientific research literature and determine what surgical procedures have been *scientifically proven safe and effective for use on patients* — *and which procedures are still experimental*, potentially dangerous, and may well do more harm than good for patients. Such an assessment requires prudentialy reviewing scientific publications and being familiar with *the ongoing methodological and scientific debates in the field*. In my opinion, the expert reports from Drs. Schechter and Brown in this case demonstrate little or no knowledge of the ongoing, raging scientific debates over the safety and effectiveness of "gender affirming" medical procedures. The reports of Drs. Schechter and Brown offer no disclosure and

demonstrate no awareness of the serious methodological defects and controversies exposing the lack of scientific foundations for the Transgender Treatment Industry (TTI). Over the past few years, scientific review after scientific review and multiple methodological exposes and national reviews in England, Sweden, Finland plus other reviews (e.g. Cochrane, Griffin, Carmichael, etc) have raised *urgent warnings and serious questions about the quality and the integrity of the scientific foundation for this very controversial field.* It it troubling that Drs Schechter and Brown appears to have financial and professional conflicts of interest as they appear to have admitted that much of their practices and income are derived from the experimental, unproven, potentially harmful methods and procedures of "affirmation" medical treatments. My review of the declarations of Drs Brown Schechter produced the following list of errors, omissions, and failures:

FAILURE TO DISCLOSE THE ONGOING CONTROVERSIES: Drs Schechter and Brown failed to properly disclose and discuss the international debates and controversies surrounding transgender affirmation methods and procedures. (See, the multiple journal articles, news reports, court cases, international reviews, etc cited below).

DEFECTIVE RESEARCH — Drs Schechter and Brown failed to properly disclose and discuss multiple peer-reviewed published exposes of significant methodological defects in research on transgender affirmation methods and procedures (e.g. the defective studies by Branstrom, Turban, and others discussed in detail below).

FAILURE TO DISCUSS CONTRARY STUDIES: Drs Schechter and Brown also failed to properly disclose and discuss recent scientific studies and reviews including the Cochrane Review, the Carmichael study, the Griffin review and the devastating scientific critiques of the

ill-fated and recanted Branstrom et al study including the many multiple, detailed, methodologically sophisticated letters to the editor.

TRANSGENDER, AFFIRMATION BREAST SURGERY IS EXPERIMENTAL and THUS NOT MEDICALLY NECESSARY: Drs Schechter and Brown failed to properly disclose and discuss the methodological and ethical controversies involving transgender breast surgery. The diagnostic process for such surgery is based soley on the patient's subjective report of dysphoria, but the medical necessity is based on the expectation that surgery will relieve the patient of the risk of, among other things, major depression, self-harm behaviors, and suicide. Competent, credible ressearch demonstrating such benefits does not yet exist. None of the papers cited by Dr. Schechter (20, 21, 22, 23, 24, 25) address themselves to the question of medical necessity for either masculinizing surgery, or feminizing surgery. They only address technical issues, management of complications, and subjective outcomes that employ precisely the same language that is used to assess cosmetic (not medically necessary) surgery of the breast. In summary, the medical necessity of transgender chest surgery is *not supported by credible*, competent, methodologically rigorous scientific evidence, and appears to be firmly in the category of cosmetic (not medically necessary) surgery.

THE ENGLAND-SWEDEN-FINLAND-COCHRANE-CARMICHAEL-GRIFFIN-BRANSTROM (Retraction) — NATIONAL SCIENCE REVIEWS and/or GUIDELINES ALL APPARENTLY CONTRADICT WPATH and the other ASSOCIATION NON-SCIENCE ENDORSEMENTS BASED ON VOTING PROCESSES: Drs Schechter and Brown also failed to properly disclose and discuss the internationally reported national reviews from England (NICE), Sweden, and Finland. These new science-based guidelines recommend different

methods, approaches, foci, and treatments than the controversial, unproven WPATH model supported by Drs. Schechter and Brown in this case. Where is the concern of WPTAH and Drs. Schechter and Brown for the suffering, vulnerable patients who deserve properly tested, proven, reliable, and efficacious treatments?

EXPERIMENTAL, UNPROVEN TREATMENTS ARE NOT "MEDICALLY NECESSARY": Drs Schechter and Brown also failed to properly disclose and discuss the opinion of the relevant scientific community that all Transgender Transition affirmation "treatments" remain — after 50 years — controversial, untested, unproven, and thus clearly still experimental — and thus *cannot be medically necessary* — given the state of current research. (See, national reviews of England, Sweden, Finland, the Cochrance Review, the Griffin review, the Carmichael study, the Branstrom (recanted) study and others as cited in detail below).

THE ASSOCIATION VOTES CITED BY DRS BROWN and SCHECHTER ARE NOT THE PRODUCT OF A RELIABLE SCIENTIFIC METHOD, NOT ACCEPTED BY THE RELEVANT SCIENTIFIC COMMUNITY, HAVE NO KNOWN ERROR RATSE. SUCH METHODS HAVE NOTABLY PRODUCED SOME HISTORIC, DISASTROUS RESULTS:

— Drs Schechter and Brown also failed to disclose and properly discuss the methodological defects in the *non-scientific, unreliable, consensus-seeking, "voting" methodology* of "associations" (e.g. WPATH, APA, ES, AAP, etc) in contrast to reliable-valid scientific research undergoing peer reivew, publication, then public review? Where is their concern for the suffering, vulnerable patients who deserve properly tested, proven, reliable, and efficacious treatments?

Professional associations and similar organizations have a tainted history of supporting unproven, controversial notions that were later shown to be improper, unreliable, and/or unethical. For example, it has been widely reported by historians that the American Medical Association supported (by voting) eugenic proposals to "improve the quality of the human stock" by coercive sterilization of "defective and undesirable Americans" and selective breeding. During the 1890s the renowned surgeon Albert Ochsner was invited to speak about his vasectomy procedure to the meeting of the American Medical Association. He recommended vasectomies to prevent the reproduction of "criminals, chronic inebriates, imbeciles, perverts, and paupers." (See, Oshsner, AJ, Surgical treatment of habitual criminals. JAMA, 1899:32:867-868). Similar to the political-policy-voting support of associations such as WPATH and APA for the Transgender Treatment Industry methods, the AMA's policy support for eugenics was a political not a scientific process. The unproven, political, experimental "treatments" of this movement were focused on "terminating the bloodlines" of the "submerged lower ten percent of the population with 'defective germ-plasm'". (See, Black, E. War Against the Weak, New York, NY, 2003). With the political-policy-voting support of the AMA, a Model Eugenics Sterilization Law was proposed to authorize sterilization of those supported in institutions or maintained at public expense. The model law encompassed the "feebleminded, insane, criminalistic, epileptic, inebriate, diseased, blind, deaf, deformed, and dependent" including "orphans, ne'er-do-wells, tramps, the homeless and paupers". Eighteen states passed laws based on the 1922 model legislation and sixty-four thousand people were forcibly sterilized. The lesson from the eugenics era is that associations can lend their weight and prestige to social movements believing that they are speaking from a foundation of science when

in fact they are articulating political or ideological concepts. Such pseudoscientific voting consensus processes are neither valid, reliable, nor evidence-based — whether they vote for experimental eugenics "treatments" or experimental transgender affirmation "treatments". Suffering patients deserve more than political posturing they deserved competent, scientifically validated, tested and proven, effective and safe treatments. We are all still waiting for the politicized Transgender Treatment Industry to provide competent scientific support for their controversial, experimental methods and theories.

A similar methodological critique is relevant to the understanding of WPATH, the American Academy of Pediatrics, the American Endocrine Society, the American Psychiatric Association, the American Psychological Association and similar groups as they declare supportive policies that are not based on credible, reliable-valid science. These policies often do not acknowledge the glaring scientific deficiencies of proposed guidelines Beyond such policy voting statements is the absence of controlled studies, the absence of prospective follow up studies and no discussion nor proof of the error rates of interventions. It might be useful to examine what has been called the "Transgender Treatment Industry" (TTI). The TTI generates considerable income for hospitals, clinicians, and pharmaceutical companies. Members of the TTI have a vested interest in believing that science has already justified their existence. As sterilization is the expected adult outcome of endocrine and surgical treatments of the procedures undertaken in youth prior, the TTI must have developed strong rationalizations to justify creating infertility. Will one day the medical profession look at support for transitioning youth in the same manner the eugenics movement is now regarded? (See, Hruz, PW, Mayer, LS, and McHugh, PR, "Growing Pains: Problems with Puberty Suppression in Treating Gender Dysphoria," The New

Atlantis, Number 52, Spring 2017 pp. 3 -36; See also, McHugh, P., Psychiatric Misadventures, The American Scholar, Vol. 62, No. 2 (Spring 1993), pp. 316-320

Why did Drs Brown and Schechter fail to report this issue? Where is their concern for the suffering, vulnerable patients who deserve properly tested, proven, reliable, and efficacious treatments?

ANECDOTAL PATIENT STORIES ARE NOT DATA: — Drs Schechter and Brown also failed to disclose and properly discuss that Anecdotal Data unverified patient reports without control groups, randomized trials, or other scientific protections for the integrity of the medical system — are NOT reliable science. Tragically, much of the Transgender Treatment Industry support seems to come from personal patient stories claiming the "transitioning treatments" helped them. This is unreliable Anecdotal Data and it is not credible, scientific information. For example, for hundreds of years physicians/barbers would use "bleeding and leeching" to remove "unhealthy blood" as a "treatment" for a range of disorders including fevers. Many people were killed by such untested, unproven procedures but the patients who survived offered wonderful marketing by naively and unscientifically claiming that "bleeding and leeching" cured them.

PATIENTS SHOULD NOT RUN THE HOSPITAL — Drs Schechter and Brown also failed to disclose and properly discuss that surgeons are not permitted to give patients whatever they ask for (see e.g. Body Identity Disorder patients in the grip of a delusion demanding amputations) without credible research demonstrating safety and effectiveness Much of the Transgender Treatment Industry support comes from personal patient stories (unreliable anecdotal evidence) claiming the "treatments" will help them. Such patient stories are

Anecdotal Data. Such data if well known to be highly unreliable unscientific information. For example, for hundreds of years physicians/barbers would use "bleeding and leeching" to remove "unhealthy blood" as a "treatment" for a wide range of illnesses. Many people were killed by such procedures (including reportedly George Washington) but the ones who survived often offered wonderful marketing by naively and unscientifically believing and claiming that "bleeding and leeching" cured them. If the patient died during bleeding the physician could say "if she had only come in sooner so we could take more of the bad blood out" and alternatively if the patient recovered from the fever the physician could claim a treatment success. This failure to understand or apply fundamental scientific principles used in clinical trial research doomed millions to death and injury by quackery. It appears that the Transgender Treatment Industry is following in this destructive, unscientific footsteps.

CONFIRMATION BIAS — A POTENTIALLY DEADLY ERROR: — Drs Schechter and Brown also *failed* to disclose and properly discuss the wide spread foundational error of Confirmation Bias in the Transgender Treatment Industry. Providers in this troubled field apply a uni-causal hypothesis for very complex psychological disturbances, in spite of the fact that gender dysphoria can appear in different ways at different stages of development, and that the demographics show exponential growth and a radical switch in demographics. Whereas gender dysphoria historically affected boys 80% of the time, now the majority of new patients are adolescent females. In the politically tainted process of the Transgender Treatment industry the dangerous error of Confirmation Bias is built in to the system and institutionalized because the process of competent diagnosis and treatment — *seeking and testing scientifically validated alternative theories, methods, and treatments* — is demonized as "conversion therapy" when

actually such treatments are scientifically proven methods for reducing anxiety, depression, suicidality (e.g. Cognitive Behavioral Therapy that would *not challenge* any of the patients' beliefs regarding gender orientation or identity). In fact, an alternative hypothesis for investigation is that the "affirmation" providers want the patient to suffer depression and anxiety *such untreated suffering motivates vulnerable patients* to undergo the often painful and damaging experimental "transitioning" process. Once again, Drs. Brown and Schechter's defective expert reports somehow ignored all of these key issues. Where is their concern for the suffering, vulnerable patients who deserve properly tested, proven, reliable, and efficacious treatments?

THE DSM IS A DICTIONARY, NOT RELIABLE, VALID, PROVEN, METHODOLOGICALLY COMPETENT SCIENCE: — Drs Schechter and Brown also failed to disclose and properly discuss the fundamentally unreliable, defective and dangerous misdiagnostic processes at the heart of the Transgender Treatment Industry. Basing life changing surgeries that damage and destroy the natural functions of perfectly healthy organs on nothing more than the unverified self-reports (conversations) of often disturbed patients as part of untested, unproven, experimental "treatments" that are "supported" by a methodologically defective research base when competent reviews have called such research "low quality" evidence and noted the "lack of any randomized clinical trials" — should be properly investigated as unethical, misconduct and an abuse of a vulnerable patient population. In addition, the reliance upon the DSM category of "gender dysphoria". It is important for legal professionals to understand that the DSM was created using a consensual, political process of small committees using voting methodologies. Voting by DSM committees is not a reliable-

valid scientific, evidence-based process. In the DSM methodology, small groups of professionals, often with ideological agendas and potentially with financial conflicts of interest, would form committees and create diagnoses to be "voted" into the DSM. The field has increasingly come to see the DSM as controversial and unreliable and in need of significant reform or retirement as a diagnostic methodology. The serious defects and limitations of DSM methodology are now well known leading to calls for reform by the relevant scientific See, e.g., Lee, C., The NIMH Withdraws Support for DSM-5: The latest community. development is a humiliating blow to the APA. Psychology Today News Blog at https:// www.psychologytoday.com/us/blog/side-effects/201305/the-nimh-withdraws-support-dsm-5 "Just two weeks before DSM-5 is due to appear, the National Institute of Mental Health, the world's largest funding agency for research into mental health, has indicated that it is withdrawing support for the APA's manual. In a humiliating blow to the American Psychiatric Association, Thomas R. Insel, M.D., Director of the NIMH, made clear the agency would no longer fund research projects that rely exclusively on DSM criteria. Henceforth, the NIMH, which had thrown its weight and funding behind earlier editions of the manual, would be "reorienting its research away from DSM categories." NIMH Director Thomas Insel: See, Transforming Diagnosis, April 29, 2013, https://www.nimh.nih.gov/about/directors/ See. thomas-insel/blog/2013/transforming-diagnosis.shtml The National Institute of Mental Health website documents the defects in DSM methodology. "Unlike our definitions of ischemic heart disease, lymphoma, or AIDS, the DSM diagnoses are based on a consensus about clusters of clinical symptoms, not any objective laboratory measure. In the rest of medicine, this would be equivalent to creating diagnostic systems based on the nature of chest pain or the quality of fever. Indeed, symptom-based diagnosis, once common in other areas of medicine, has been largely replaced in the past half century as we have understood that symptoms alone rarely indicate the best choice of treatment. Patients with mental disorders deserve better. NIMH has launched the Research Domain Criteria (RDoC) project to transform diagnosis by incorporating genetics, imaging, cognitive science, and other levels of information to lay the foundation for a new classification system."] In my opinion, these views are generally accepted by the relevant scientific community and sound the death knell for the diagnostic practices of the experimental Transgender Treatment Industry. In sum, the field has come to agree that the DSM was indeed based upon a less than optimal process.

DRS BROWN AND SCHECHTER DID NOT REPORT RISKS AND DANGERS TO "TRANSGENDER TREATMENTS" INCLUDING: — Drs Schechter and Brown also *failed* to disclose and properly discuss serious risks with their experimental "treatments":

Sterilization. Sex Reassignment Surgery (SRS) that removes testes, ovaries, or the uterus is *inevitably sterilizing and irreversible*. While by no means all transgender adults elect SRS, many patients do ultimately feel compelled to take this serious step in their effort to "live fully as the opposite sex". More immediately, practitioners recognize that the administration of cross-sex hormones, which is often viewed as a less radical measure, and is now increasingly done to minors, creates a risk of irreversible sterility. 31 These risks have never been properly studied nor quantified in a systematic manner. As a result, even when treating a child, the MHP, patient, and parents must consider *permanent loss of reproductive capacity (sterilization) to be one of the major risks of starting down the road*. The risk that supporting social transition may put the child on a pathway that leads to intentional or unintentional permanent sterilization is

particularly concerning given the disproportionate representation of minority and other vulnerable groups among children reporting a transgender or gender-nonconforming identity. See C. Guss et al., TGN Adolescent Care at 4 ("a side effect [of cross-sex hormones] may be infertility") and 5 ("cross-sex hormones . . . may have irreversible effects"); Tishelman et al., Serving TG Youth at 8 (Cross-sex hormones are "irreversible interventions" with "significant ramifications for fertility").

Loss of sexual response. Puberty-blockers prevent maturation of the sexual organs and response. Some and perhaps many transgender individuals who transitioned as children and thus did not go through puberty consistent with their sex face significantly diminished sexual response as they enter adulthood, and are unable ever to experience orgasm. To my knowledge, data quantifying this impact has not been published. In the case of males, the cross-sex administration of estrogen limits penile genital function. Much has been written about the negative psychological and relational consequences of anorgasmia among non-transgender individuals that is ultimately applicable to the transgendered. (Levine, *Informed Consent*, at 6.) (Perelman and Watters, 2016) Delayed Ejaculation in Handbook of Clinical Sexuality for. Mental Health Professionals 3rd edition, New York, Routledge)

The long-term health risks of this major alteration of hormonal levels have not yet been quantified in terms of exact risk thus appropriate, ethical, complete informed consent is not yet possible for such experimental "treatments". However, a recent study found greatly elevated levels of strokes and other acute cardiovascular events among male-to-female transgender individuals taking estrogen. Those authors concluded, "it is critical to keep in mind that the risk for these cardiovascular events in this population must be weighed against the benefits of

hormone. *See* Tishelman et al., *Serving TG Youth* at 6-7 (Long-term effect of cross-sex hormones "is an area where *we currently have little research to guide us*"). treatment." See, D. Getahun et al. (2018), *Cross-Sex Hormones and Acute Cardiovascular Events in Transgender Persons: A Cohort Study*, Annals of Internal Medicine at 8, DOI:10.7326/M17-2785.

Others similarly noted that administration of cross-sex hormones creates "an additional risk of thromboembolic events"—which is to say blood clots (Guss et al., TGN Adolescent Care at 5), which are associated with strokes, heart attack, and lung and liver failure. The young patient may feel, "I don't care if I die young, just as long I get to live as a woman." The mature adult may take a different view.

Health risks inherent in complex surgery. Complications of surgery exist for each procedure, and complications in surgery affecting the reproductive organs and urinary tract can have significant anatomical and functional complications for the patient's quality of life.

Disease and mortality generally. The MHP, the patient, and in the case of a child the parent, must also be aware of the wide sweep of strongly negative health outcomes among transgender individuals. *Shortened life expectancy has been repeatedly documented* in Sweden, US, and Denmark. See, Levine, Informed Consent, at 5 (citing T. van de Grift, G. Pigot et al. (2017), A Longitudinal Study of Motivations Before & Psychosexual Outcomes After Genital Gender-Confirming Surgery in Transmen, J. Sexual Medicine 14(12) 1621.).

Whatever the reason, transgender individuals including transgender youth certainly experience greatly increased rates of mental health problems. I have detailed this above with respect to adults living under a transgender identity. Indeed, Swedish researchers in a long-term study (up to 30 years since Sex Reassignment Surgery (SRS), with a median time since SRS of >

psychiatric care. (Dhejne, Long Term, at 6-7.) With respect to youths a cohort study found that transgender youth had an elevated risk of depression (50.6% vs. 20.6%) and anxiety (26.7% vs. 10.0%); a higher risk of suicidal ideation (31.1% vs. 11.1%), suicide attempts (17.2% vs. 6.1%), and self-harm without lethal intent (16.7% vs. 4.4%) relative to the matched controls; and a significantly greater proportion of transgender youth accessed inpatient mental health care (22.8% vs. 11.1%) and outpatient mental health care (45.6% vs. 16.1%) services.

AFFIRMATION IGNORES MANY OTHER WAYS TO HELP THE SUFFERING— Drs Schechter and Brown also *failed* to disclose and properly discuss that the *diagnosis of "gender dysphoria" encompasses a diverse_and controversial array of conditions*, with widely differing pathways and characteristics depending on age of onset, the complexities introduced by co-occurring mental illnesses, social contagion and other environmental factors, among other things. Data from one population (e.g. adults, those struggling with complex mental illnesses) should not naively be assumed to be easily applicable to others (e.g. children, those changed by social contagion) and other factors. The developmental and mental health patterns for of these groups are sufficiently different that data developed in connection with one of these populations *cannot be assumed to be reliably applicable to another.* See, K. Zucker (2018), The Myth of Persistence: Response to "A Critical Commentary on Follow-Up Studies & 'Desistance' Theories about Transgender & Gender Non-Conforming Children" by Temple Newhook et al., INT'L J. OF TRANSGENDERISM at 10, DOI: 10.1080/15532739.2018.1468293 ("Myth of Persistence").

NOT FDA APPROVED: — Drs Schechter and Brown also *failed* to disclose and properly discuss that the Food and Drug Administration has not approved the medications/ hormones used in the Transgender Treatment Industry for the treatment of gender dysphoria. The treatment research appears to document that such hormone treatments are of little if any benefit to patients and can cause severe damage to bone density and prevent normal psychological development during the key adolescent phase of life. (See, Carmichael, national science reviews of England-Sweden-Finland, and other publications cited in the Notes section of this declaration). Such off-label (not FDA approved) use of these powerful, permanently lifealtering, medications is further evidence of the experimental nature of these scientifically unsupported treatments.

FAILURE TO DISCUSS THE FAILURE TO CONDUCT COMPETENT RESEARCH ON the UNKNOWN NUMBER AND PERCENTAGE of PATIENTS WHO DROP OUT OF TRANSITIONING OR REVERSE THE PROCESS (Detransitioners): — Drs Schechter and Brown also failed to disclose and properly discuss — the phenomenon of desistance or regret experienced later than adolescence or young adulthood, or among older transgender individuals, has to my knowledge not been quantified or well-studied. However, it is a real phenomenon. I myself have worked with multiple individuals who have abandoned trans female identity after living in that identity for years, and who would describe their experiences as "regret". More dramatically, a surgical group prominently active in the SRS field has published a report on a series of seven male-to-female patients requesting surgery to transform their surgically constructed female genitalia back to their original male form. See Djordjevic ML, Bizic MR, Duisin D, Bouman MB, Buncamper M. Reversal Surgery in Regretful Male-to-Female

Transsexuals After Sex Reassignment Surgery, J Sex Med. 2016 Jun;13(6):1000-7. doi: 10.1016/ j.jsxm.2016.02.173. Epub 2016 May 4. PMID: 27156012. An increasingly visible online community of young women who have desisted after claiming a male gender identity at some point during their teen years. Given the rapid increase in the number of girls presenting to gender clinics within the last few years, the phenomena of regret and desistance by young women deserves careful attention and study by MHPs. As reported by one author in 2021, 60,000 testimonies of personal de-transition can be found on the Internet. See, Pablo Exposito-Campos. A typology of gender detransition and its implications for health care providers J Sex & Marital Therapy 2020 https:..doi.org/101080/0092623x.2020.1869126); See also, reportedly one Reddit subthread [See, https://www.reddit.com/r/detrans/new/ 1 for detransitioners currently has more than 17,000 members, and a facility in Sweden, the Lundstrom Gender Clinic, provides trauma therapy for detransitioners. [See, The Trans Train and Teenage Girls (Swedish documentary with English subtitles) at https://www.youtube.com/watch?v=oDV-ZL6- Gu0]

NOT GENERALLY ACCEPTED — Drs Schechter and Brown also *failed* to honestly and properly disclose that the A) underlying defective science, B) unreliable diagnostic methods, C) confirmation bias riddled treatment selection procedures, and the still unproven-experimental treatments of the Transgender Treatment Industry have never been generally accepted by the relevant scientific community.

NO ERROR RATES — Drs Schechter and Brown also *failed* to honestly and properly disclose that the A) underlying defective science, B) unreliable diagnostic methods, C) confirmation bias riddled treatment selection procedures, and the still unproven-experimental

treatments of the Transgender Treatment Industry have no known error rates thus more patients could be injured than helped by such methods and procedures as recent studies demonstrate (See Branstrom critiques, Carmichael study, etc.)

FAILURES TO DISCLOSE INFORMED CONSENT ERRORS: In the present treatment paradigm that is supported by Dr. Schechter, and applied to self-identified transgender persons, the diagnosis is made by the patient, and affirmed by counselors, primary care providers, pediatricians, and psychological services providers. Confirmation of the diagnosis amounts to the use of questionnaires that often are identical to questionnaires found on line. The questions, and their answers use highly rehearsed language that is the same whether asked by the school nurse, or the licensed psychologist. They are based upon the affirmation model of the condition, and assumes that the condition is biologically determined, even though there is little to no scientific evidence to support this hypothesis. No alternative hypotheses of causation of the patient's condition are permitted.

By the time the patient presents to the transgender surgeon, they have been the subject of affirmation processes that include everything from social transitioning, to hormonal manipulation. The surgical services provider does not question the diagnosis, nor investigate the science upon which it is based. Essentially the surgeon is performing permanently life-altering surgical interventions to cure a psychological condition that was diagnosed by the patient, and sometimes the patient made the diagnosis before they even entered puberty. Since the abandonment of frontal lobotomies in 1967, there has been no other psychological condition for which surgery is performed, and there is no other area of surgical care where the

diagnostician is the patient themselves, and the surgeon has no means of confirming or rejecting the diagnosis.

Valid surgical consent requires that the surgeon is ultimately responsible for the accuracy of the diagnosis. For example, if an endocrinologist refers a patient for thyroidectomy because they have diagnosed a malignant thyroid nodule, the operating surgeon is still obliged to ensure the validity of the diagnosis. He has to entertain alternative diagnoses. Is it a benign nodule? Can it be treated with non-surgical means at lower risk to the patient. What do the scans show? What do the hormone levels show? Having evaluated all the alternative possibilities in the differential diagnosis, the surgeon can then counsel the patient and their family on the options of care, the likelihood of cure, and proper informed consent can be obtained.

The Transgender Treatment Industry, employing the scientifically unsupported WPATH guidelines, co-authored by Dr. Schechter, essentially excuse the surgeon from any responsibility for the diagnostic process or its consequences if the diagnosis is incorrect.

The 7th edition of the WPATH guidelines only requires two letters written by psychologists, and a period of social transition. There is no action taken to verify the diagnosis on the part of the surgeon. The surgeon has no means by which to anticipate who might benefit or who might be harmed by surgery.

Transgender surgeons like Dr. Schechter have no means of evaluating the diagnostic error rate because there is no= body of reliable scientific evidence that can be used to counsel the patient about what their risk of transgender regret is. The ever growing population of detransitioning patients suggests that the error rate may be considerable, and the future medicolegal consequences may be proportionate.

In sum, in my opinion the expert reports of Drs Brown and Schechter — are misleading, un-scientific, advocacy statements of two providers that appear deeply embedded — politically, ideologically, and financially — in the Transgender Treatment Industry. It is currently not clear whether the "treatment" efforts of that industry and providers like Drs Schechter and Brown are causing more harm than benefit to the vulnerable, suffering patients we should seek to help and support with treatments proven safe and effective by validated, competent scientific research. After 50 years of experimental, unproven, treatments in this area, the vulnerable, suffering patients are still waiting for scientifically validated treatments.

13. Review of Dr. Brown's Opinions Regarding the Plaintiff's Medical Records and My Review of the Plaintiff's Medical Records:

Dr Brown's updated (2nd) report on the plaintiff's medical records continued his avoidance of the many controversies, methodological defects, ongoing debates, and incongruous findings of the Transgender Treatment Industry. Once again, he failed to mention the significant hazards involved with these experimental treatments and the published reviews documents documented the lack of benefits and harms of "transitioning" treatments. My own review of the plaintiff's medical records found a demonstration of the errors in the industry described below including:

— *lack of appropriate informed consent* including failure to disclose and discuss the "low quality" of evidence this industry is based upon and the lack of randomized trial research and the lack of long-term research indicating such experimental treatments are more helpful than harmful to most patients.

— failure to carefully investigate the psychosocial alternative hypotheses regarding the etiology of the patient's disorder (See, new treatment guidelines from Sweden and Finland seeking psychological evaluations over years prior to intrusive medical "treatments" leading to harm to otherwise healthy organs

— failure to acknowledge that the "association" endorsements of these experimental treatments are based upon consensus-seeking (committee voting) and not evidence-seeking, scientific methodologies.

and the other errors and failures to disclose as discussed above.

14. Why I Do Not Engage in Experimental Treatments Lacking Reliable, Credible Scientific Support with Gender Dysphoric (Transgender) Patients — or Any Other Patients: As multiple national science reviews and multiple peer reviewed science publications demonstrate, the relevant scientific community has never accepted the reliability, validity, safety or effectiveness of "gender affirmation" treatment procedures — including surgical procedures. Significant medical, ethical, and potential legal problems are created when health care providers employ experimental, unproven, treatment including surgical procedures. As multiple national science reviews (e.g. Sweden, Great Britain, Finland), a Cochrane Review and multiple other published reviews of this controversial research field have recently noted, current Transgender Treatment Industry procedures are only supported by "low quality" methodologically flawed, research lacking general acceptance and lacking any published error (See, eg. the Branstrom, et al study with accompanying multiple exposes of the rates. researchers' serious methodological errors and failures to report the data accurately). example, the current assortment of "gender affirmation" surgical procedures lack credible,

reliable and valid scientific support as there are currently no published randomized trials, nor and competent long-term research studies demonstrating safety, efficacy, and scientific validity for these currently controversial, unproven, experimental treatment protocols. Due to this well-documented lack of scientific support and only low quality evidence of efficacy and safety, I will not personally engage in the delivery of experimental gender affirming medical interventions to patients of any age. I will not consider doing such invasive, potentially harmful surgical procedures — that can lead to life-long sterilization of vulnerable patients — until reliable-valid, credible scientific research supports such methods.

- 15. The biological basis of sex Sex is not "assigned at birth" but permanently "assigned" at conception by DNA. Medical technology can be used to determine a fetus's sex before birth. It is thus not scientifically correct to talk of doctors "assigning" the sex of a child at birth; almost anyone can accurately and reliably identify the sex of an infant by genital inspection with approx 99.9% accuracy. Every nucleated cell of an individual's body is chromosomally identifiably male or female—XY or XX. Claims that patients can via hormonal and surgical treatments obtain a "sex change" or a "gender transition" process are misleading and scientifically impossible. In reality, the typical "transgender" Gender Discordant patient has normal healthy sex organs but struggles with Gender Discordant feelings and perceived identity a psychiatric and not a medical problem.
- 16. ARE PATIENTS and PARENTS UNETHICALLY MISINFORMED BY PROVIDERS WHO FAIL TO DISCUSS THE KNOWN RISKS AND DANGERS OF "TRANSITIONING" TREATMENTS AND THE INTERNATIONAL CONTROVERSIES IN

THIS FIELD? : Putting a patient of any age on a pathway towards life as a transgender person puts that individual at risk of a wide range of long-term or even life-long harms, including:

- sterilization (whether chemical or surgical) and associated regret and sense of loss;
- inability to experience orgasm (for trans women);
- physical health risks associated with exposure to elevated levels of cross-sex hormones;
 - surgical complications and life-long after-care;
 - alienation of family relationships;
 - inability to form healthy romantic relationships and attract a desirable mate;
- elevated mental health risks including increased depression, suicidality, and completed suicide.

Given that Drs Schechter and Brown failed to inform this court of the defects, uncertainties and controversies surrounding the entire field of Transgender Treatments, it seems difficult to imagine that they are properly informing patients of these defects, uncertainties and controversies.

17. VIRTUALLY ALL TRANSGENDER PATIENTS ARE BORN WITH HEALTHY NORMAL SEX ORGANS AND NO KNOWN BRAIN OR GENETIC ABNORMALITIES and NO SCIENTIFICALLY VALIDATED REASON TO SURGICALLY DAMAGE THEIR HEALTHY ORGANS - Transgender surgery is currently experimental and thus not medically necessary, as it seeks goals and benefits that have not yet been scientifically tested, validated, and proven. The long-term research on transgender surgical outcomes FAILED to show benefits and

suggested injuries from these experimental procedures (See Branstrom et al. research cited and discussed in the notes section of this declaration).

Contrary to assertions and hopes that medicine and society can fulfill the aspiration of the trans individual to become "a complete man" or "a complete woman," *this is not biologically attainable*. It is possible for some adolescents and adults to pass unnoticed as the opposite gender that they aspire to be—but with unknown levels of limitations, costs, and risks.

18. INDIVIDUAL PATIENTS and THE FIELD AS A WHOLE SHOULD CAREFULLY REVIEW AND CONSIDER THE POTENTIAL SURGICAL COMPLICATIONS and/or IATROGENIC INJURIES WITH EXPERIMENTAL TRANSGENDER SURGERY of UNKNOWN LONG-TERM SAFETY AND EFFECTIVENESS:

EXAMPLES OF SURGICAL RISKS: "Masculinizing" Female to "Male"
Complications:

"Transgender Procedures Metoidioplasty: Following hormonally induced clitoromegally, the clitoris is released so that it hangs dependently, mimicking a small phallus, the urethra is lengthened by the use of mucosal, and/ or cutaneous flaps and/or grafts so that the urinary stream emerges from the tip of the counterfeit phallus. Reported complications with varying degrees of frequency:

1. Urethral strictures producing varying degrees of urinary obstruction and retention. a. Requires re-operation to open or dilate the scar strictures, additional grafts, urinary diversion through the use of a bladder catheter through the lower abdominal skin (suprapubic catheter)

- 2. Urethral- cutaneous fistulae (urine leaking from holes in the neo-urethra caused by wound healing problems and obstruction as in 1. above) a. Requires re-operative procedures as in 1. a. above.
 - 3. Recurrent lower urinary tract infections caused by 1, and 2 above.
- 4. Chronic cysto-cutaneous fistula (urine leaking from the bladder through the skin of the lower abdomen) caused by the need for suprapubic catheter to divert the urinary stream to protect the neo-urethra construct if chronic distal urinary obstruction results from original or subsequent re-operation.
- 5. **Life-long reproductive sterilization**, since metoidioplasty is often accompanied by previous or subsequent hysterectomy and oophorectomy.

Phalloplasty: The construction of a counterfeit "neo-phallus". Typically accomplished by the transplantation of a vascularized, sensate flap of skin and associated soft tissue from the non-dominant forearm (Sensate Radial Forearm Flap). Blood vessels and sensory nerves in the flap are connected to blood vessels and nerve in the area of the native genital structures. A highly technical procedure requiring microscopic assistance. *Many published studies do NOT report complication rates*. *Overall, the reported complication rate is above 50% for the most favored operation to construct counterfeit phallus* (1). The most frequent complications involve stricture or leakage of urine, and occurs in approximately 40% of all patients (2, 3, 4), requiring surgical correction. Infectious complication rate of 9%, with associated complete flap loss in 2% of patients have been reported in a patient series by Leriche et al., as is cited in a comprehensive review of phalloplasty complications (5). One single center review of a 20 year experience shows that blockage of blood flow to the pseudo-phallus, requiring reoperation occurs 11% of

the time (6). This same review showed complete loss of the construct occurred in 3% of patients, and 17% of patients showed significant wound healing issues requiring re-operation and long term wound care. In a comprehensive review of the most common phalloplasty surgeries, published in Clinics of Plastic Surgery in 2018, the authors state, "Phalloplasty is known for its high rate of complication". Their systematic review of the literature showed complete flap loss approaching 2%, partial loss of the flap in 5-7% of cases, opening of wounds (dehisence) in 11% of patients, and a high rate of blood clot formation in the patient's legs with risk of pulmonary embolization due to the long operative time, patient positioning for surgery, and the prolonged bed rest required (5). Similar complication rates have been reported in a review of 269 phalloplasties performed at a single center in Germany over a 22 year period. A review of patients whose phalloplasties included the use of prosthetic implants showed implant associated complication rate of 44%, including infection, extrusion, surgical replacement, and the need for surgical removal (8). There is also a high complication rate associated with the defect caused by harvesting the forearm tissue that is used in the construction of the counterfeit phallus. Kuran et al. in a 2019 article reviewing 940 radial forearm flap surgeries (730 of which were in transgender patients) showed an overall complication rate of 8%. Infection in 16%, chronic pain in 10%, loss of strength and sensation in the limb in 5%, contracture with loss of mobility requiring occupational therapy in 6.5%, and failure of the covering skin graft in 4.5%. (9) In addition to the cosmetic result, and the ability to urinate while standing, it would be expected that the transgender scientific literature would rigorously investigate the effects of these surgeries on erotic sensibility but they have not. Human sexuality and gender identity discordance is at the heart of the justification for these very elaborate surgeries which carry high

complication rates, however, a review of outcomes in this area shows the low quality of outcomes data, and thus the experimental nature of these operations. In a 2019 literature review by Morrison et al. (10) the authors found that of 341 articles that had been published in peer reviewed journals, only 26 were found suitable for analysis.

The authors summarize by saying, "Little data are available on genital sensibility outcomes after phalloplasty, and there are no standardized approaches for assessment of either sensibility or erogenous perception." They then conclude by confessing, "it is difficult to draw evidence-based conclusions." This is a remarkable finding given that the human genital apparatus has two basic functions, namely reproduction and erotic sensibility. We know that reproduction is irreversibly destroyed by these operations, and now we see that erotic sensibility is degraded if not destroyed as well. Having thus excluded the entirety of genital function, all that remains is a cosmetic result, which is not a scientifically quantifiable product. In summary, masculinizing female to "male" surgeries are highly complex procedures with a very high complication rate. The scientific literature in this area of medicine is largely of low quality, and evidences the experimental nature of these operations. The most scientifically rigorous long-term studies (11,) show that the stated goals of the surgeries, including decreased anxiety, decreased psychiatric hospitalization, decreased substance abuse, decreased self harm, and decreased suicide are not met. The long term cohort study from Sweden shows that persons who have completed all transition steps from female to "male", when compared with a population matched cohort, have a substance abuse rate that is 3.5 times higher, a psychiatric hospitalization rate that is 3.5 times higher, a rate of incarceration for violent crime that is 9.9 times higher, and a suicide rate that is 40 times higher than the control group. When the authors graphed these

findings over time, they show that any improvement in these markers begins to disappear within 6 to 8 years following completion of surgery. This largely explains the suggestion of improvement seen in the low quality data that is tainted by short follow-up, and self-selection bias. The best population based, cohort matched, longitudinal studies appear to show that all that is achieved by these surgeries is a cosmetic result, and reproductive sterilization.

COMPLICATIONS:

- 1. Complete loss of the microvascular flap. Typically caused by technical failure of the venous connection, may also result from clot formation in the blood vessels, or pressure of swelling that compresses the blood supply. a. Requires major re-operation to remove the dead flap, and placement or retention of urinary diversion with the use of a suprapubic bladder catheter.
- 2. Partial loss of the microvascular flap. Caused by transient or persistent insufficiency of blood flow, with similar etiologies as in 1 above. a. Requires re-operation to debride (remove) dead tissue, and chronic wound care involving daily dressing changes, wound care visits. b. Requires placement or retention of urinary diversion with suprapubic catheter to prevent urinary contamination of the chronic wound.
- 3. Urethro-cutaneous fistulae (urine leakage from the counterfeit phallus). Caused by wound healing problems within the construct that may result from inadequate blood flow, pressure, or distal urinary obstruction. a. Requires placement or long term retention of the suprapubic catheter, and surgical procedures to repair the wound openings.

- 4. Urethral strictures with associated urinary obstruction of varying degrees. a. Repeated urethral dilation and/ or catheterization, or re-operation to relieve chronic strictures, and will likely require urinary diversion as above.
- 5. Lower Urinary Tract Infections: resulting from any or the above complications of surgery. 6. Extrusion of erectile and or testicular prostheses. Cause by presence of bacteria on the implanted devices. Bacteria may have been introduced at time of surgical placement, or may result from above complications of partial flap loss or lower urinary tract infections that result from above complications.
- 7. Partial or complete loss of erotic sensibility. Native clitoris is typically placed at the base of the counterfeit phallus as part of the construct. Some degree of incidental surgical injury to sensory nerves is expected. Sensation from the shaft of the counterfeit phallus, provided by the surgical connection of the forearm nerve to the groin nerves, is considered successful if it provides any tactile sensation. It is not expected to produces the erotic provocation that the sensory apparatus of the native vagina produces.
- 8. Upper extremity complications. Common problems with the donor site can include: partial or complete loss of the skin grafts used to cover the exposed muscles and tendons that results from harvesting the forearm flap. Uncommon, but nonetheless possible, ischemic hand injury (inadequate blood flow to hand). a. Chronic wound care to achieve healing, and to protect exposed tendons. b. Scarring and tendon injuries from exposure may result in loss of range of motion. This is typically temporary, but may become permanent, depending on the age of the patient, and will require occupational therapy (OT). c. Chronic pain from harvest of the flap, or complications of healing as above.

9. Lifelong Reproductive Sterilization. These surgeries are typically preceded by or followed by hysterectomy and oophorectomy. An essential human function is being destroyed in order to produce a cosmetic result.'

Vaginoplasty - Complications:

Feminizing surgeries, performed on male persons, include the creation of external and internal structures that mimic the appearance and function of female genitalia. The most commonly performed surgery, called "inversion vaginoplasty" uses tissues from the patient's native genital structures to create neo-vaginal labia majora and minora, and a skin sleeve that is inverted into the pelvis to create a receptive passage capable of receptive copulation. In the process of this operation, the patient is castrated, the penis is opened, the erectile tissues removed, a portion of the glans is preserved while trying to preserve the erotic innervation so that it can be used to create a neo-clitoris, the skin of the penis is surgically closed and inverted into the pelvis, while preserving its native blood supply. The scrotal skin is used to construct the labia, and the urethra is shortened to an opening at the base of the neo-clitoris. Other vaginoplasty operations may involve the use of vascularized flaps from the thighs or abdomen to create the receptive neo-vaginal structure. Portions of the lower intestinal tract may be used to create the receptive sleeve of the neo-vagina. These operations are often used when prior surgeries have failed for a variety of reasons that will be presented below, or they may be a first choice if the patient has a poverty of genital tissue. Such poverty is a common result of prior use of puberty blockade and cross-sex hormones if the patient has been the subject of treatments that began in early adolescence.

As documented in the NOTES section of this declaration, The scientific literature offered in support of the efficacy, safety, and cost-effectiveness of these procedures is of low quality, and comprised almost entirely of case-series reports that lack controls, are of short duration, suffer from various biases including self-selection and confirmation bias. These problems are attested to by citations offered by Dr. Schechter in his expert testimony for the plaintiff. Dr. Schechter, in support of the efficacy of vaginoplasty surgery, cites a 2014 paper (20) which is typical. It reports outcomes on a consecutive case series of 254 male to "female" surgical patients. The data presented in support of the efficacy of surgery was in the form of a questionnaire that asked questions about satisfaction with the result (subjective data). The average follow up interval was 5 years, with the longest follow up in a single patient at 7 years (short follow-up), and only 46% of patients completed the questionnaire (self-selection bias). In another of Dr. Schechter's cited articles, the authors present a prospective study of only 39 patients (a very small sample), who are given questionnaires about their quality of life (subjective data), and the final evaluation of outcomes is *only 6 months post operation* (very short follow up given that research shows deep regret often begins on average 10 years after surgery. Based upon such low quality data, the authors conclude by claiming that their study result, "endorses sex reassignment surgery as a valuable option for these patients."

In his expert testimony, Dr. Schechter, having defined gender dysphoria, then goes on to justify surgical treatment based upon "medical necessity". He states, "Gender dysphoria can lead to debilitating anxiety and depression, as well as serious incidents of self-harm, including self-mutilation, suicide attempts, and suicide. Yet with only a single exception, *no measure was made of the effects of surgery* on what is claimed to constitute the "medical necessity" for these

procedures. The long term research — the Branstrom study cited in detail in the Notes Section of this declaration showed NO benefits for transgender surgery and NO reduction in succeed and an increase in serious suicide attempts requiring hospitalization in patients receiving the surgery. These recent, long-term, published, peer reviewed, credible research findings are quite contrary to the claims of Dr Schechter and Dr Brown — as are the National Science Reviews in this area from England-NICE, Sweden, and Finland (see Notes section in this declaration).

Scientific rigor would demand an examination of such outcomes as: rates of substance abuse, psychiatric hospitalization, self-harm, or suicide, and how they were changed by surgery. The only paper in Dr. Schechter's list of citations that asks these crucial questions concerning efficacy is a very comprehensive, long term, longitudinal population cohort study (11) which actually shows the opposite of what Dr. Schechter claims for these patient outcomes. When followed beyond 8 years post operatively, this paper shows patients receiving Dr Schechter's treatments have the same alarmingly high rates of hospitalization, substance abuse, self-harm, and completed suicide as persons who have had no medical or surgical intervention. The fact that the citation is included by Dr. Schechter, but never discussed in his opinion regarding efficacy is troubling. In summary, on the issue of the safety and efficacy of these surgeries, the scientific support is very weak, while the scientific evidence rejecting the hypothesis of efficacy is quite strong.

BREAST SURGERY - COMPLICATIONS:

Mastectomy/ Chest Masculinization, Breast Augmentation/ Chest Feminization

The surgical removal of the breasts, and the re-contouring of the chest through liposuction is a common procedure for women who seek to present as men. These operations are

performed in both men and women, for a variety of reasons, are very safe, and typically performed in the outpatient setting. It is important to understand that the only way of distinguishing cosmetic breast surgery from "medically indicated" surgery is based upon the diagnosis of underlying pathology. For example, breast reduction may be cosmetic, or it may be medically indicated. In both cases, the patient presents with a complaint that her breast are too big. The distinction between cosmetic breast reduction, and medically indicated breast reduction, is based upon the presenting symptoms of orthopedic problems caused by the weight of the breasts, but even then, the weight of the removed tissue is factored into the objective verification that the surgery was "medically necessary".

The same issues are at stake in breast enhancement for men seeking to present as women. Cross-sex hormones will have caused varying degrees of gynecomastia (breast enlargement in men). Surgical enhancement procedures are exactly the same in both men and women. Medically necessary surgery in women is based upon the diagnosis of an objective medical condition, such as Poland's syndrome (congenital absence of a breast), surgical absence of the breast following cancer care. In men, the objective diagnosis of gynecomastia might warrant surgery based upon medical necessity, but it would be a removal of tissue. A rare diagnosis of breast cancer in a man might warrant chest wall reconstruction after cancer care. On the other hand, cosmetic surgery of the breast is entirely about the subjective feelings of the patient, and that is all that we have in the case of the self-identified transgender patient.

In the case of transgender chest surgery, the diagnosis is based on the patient's subjective report of dysphoria, but the medical necessity is based on the expectation that surgery will relieve the patient of the risk of, among other things, major depression, self-harm behaviors, and

suicide. None of the papers cited by Dr. Schechter (20, 21, 22, 23, 24, 25) address themselves to the question of medical necessity for either masculinizing surgery, or feminizing surgery. They only address technical issues, management of complications, and subjective outcomes that employ precisely the same language that is used to assess cosmetic surgery of the breast. In summary, the medical necessity of transgender chest surgery is not supported by scientific evidence, and appears to be firmly in the category of cosmetic surgery.

19. SUMMARY OF OPINIONS:

- There are no currently no competently conducted, long-term, peer-reviewed published, reliable and valid, research studies documenting the number or percentage of patients receiving gender affirming medical interventions who are helped by such procedures.
- There are no long-term, peer-reviewed published, reliable and valid, research studies documenting the number or percentage of patients receiving gender affirming medical interventions who are injured or harmed by such procedures.
- There are no long-term, peer-reviewed published, reliable and valid, research studies documenting the reliability and validity of assessing gender identity by relying solely upon the expressed desires of a patient.
- There are no long-term, peer-reviewed published, reliable and valid, research studies documenting any valid and reliable biological, medical, surgical, radiological, psychological, or other objective assessment of gender identity or gender dysphoria.
- A currently <u>unknown</u> percentage and number of patients reporting gender dysphoria suffer from mental illness(es) that complicate and may distort their judgments and perceptions of gender identity.

- A currently <u>unknown</u> percentage and number of patients reporting gender dysphoria are being manipulated by a peer group, social media, YouTube role modeling, and/or parental social contagion and social pressure processes.
- Patients suffering from gender dysphoria or related issues have a right to be <u>protected</u> from experimental, potentially harmful treatments lacking reliable and valid, peer reviewed, published, long-term scientific evidence of safety and effectiveness.
- It would be a serious violation of licensing rules, ethical rules, and professional standards of care for a health care professional to provide gender transition or related procedures to any patient without first properly obtaining informed consent including informing the patient and/or guardian(s) of the lack of valid and reliable on the long-term risks and benefits of "affirmation" treatments.
- A large percentage of children (over 80% in some studies) who questioned their gender identity will, if left alone, develop an acceptance of their natal (biological) sex.
- Medical treatments may differ significantly by sex according to chromosomal assessment but not gender identity. Misinforming physicians of a patient's biological sex can have deleterious effects on treatment for medical conditions.
- NOT GENERALLY ACCEPTED: Affirmation medical treatments hormones and surgery for gender dysphoria and "transitioning" have <u>not been accepted by the relevant scientific communities</u> (biology, genetics, neonatolgy, medicine, psychology, etc).
- NO KNOWN NOR PUBLISHED ERROR RATES: Gender transition "Affirmation" medical assessments and treatments hormones and surgery for gender dysphoria and

"transitioning" <u>have no known, peer reviewed and published error rates</u> — the treatments and assessment methods lack demonstrated, reliable and valid error rates.

- ASSOCIATION GUIDELINES AND ENDORSEMENTS ARE NOT SCIENCE: Political activists, political activist physicians, and politically active medical organizations that operate by voting methodologies (e.g, WPATH, the American Medical Association, the American Academy of Pediatrics, the American Endocrine Society) are <u>not</u> the relevant scientific community, they are <u>politically</u> active professional organizations. These organizations operate via consensus-seeking methodology (voting) and political ideologies (e.g., Critical Theory) rather than evidence-based scientific methodologies.
- ETHICAL RESTRICTIONS ON EXPERTS WILL THERE BE A PROPER INVESTIGATION OF MISINFORMATION? : Experts in legal cases have an ethical obligation to honestly, fairly, and accurately disclose and discuss the international controversies regarding the safety, effectiveness, reliability, and credibility of the <u>Gender Transition Industry</u>. It is astonishing that in their expert declarations, Drs Schechter and Brown *failed* to disclose and discuss the controversies, complex issues, debates, and contrary national science review recommendations in this field. Dr Brown even swore in his declaration that... "Nor is there any uncertainty or dispute in the medical field regarding the medical necessity of this care." It is difficult to imagine a more inaccurate summary of the state of the embattled, experimental Transgender Treatment Industry. Will such mis-information be properly investigated by the relevant authorities?
- 20. DR LAPPERT's RESEARCH NOTES: To assist in my testimony in this case. I include my notes, references and citations documenting the depth and breadth of the serious

controversies in this field. Over the past few years, the glaring defects in the research foundations of the Transgender Treatment Industry have been exposed for all the world to see.

Controversy - 2015 Dutch Study by Vrouenraets et al, Early Medical Treatment of Children and Adolescents With Gender Dysphoria: An Empirical Ethical Study, Journal of Adolescent Health 57 (2015) 367e373. ...no consensus exists whether to use these early medical interventions.....Results: Seven themes give rise to different, and even opposing, views on treatment: (1) the lack of an explanatory model for GD; (2) the unknown nature of GD (normal variation?, social construct?, or mental illness?); (3) the role of physiological puberty in developing gender identity; (4) the role of comorbidity [with severe mental illnesses]; (5) unknown possible physical or psychological effects of (refraining from) early medical interventions; (6) child competence and decision making authority [to give truly informed consent to be sterilized for experimental procedures?]; and (7) the role of social context ... how GD is perceived. Strikingly, the guidelines are debated both for being too liberal and for being too limiting. Conclusions: As long as debate remains on these seven themes and only limited long-term data are available, there will be no consensus on treatment. Therefore, more systematic interdisciplinary and (worldwide) multi-center research is required. It is striking that Drs. Brown and Schechter somehow both failed to properly report this ongoing international debate within their claimed filed of expertise.

2011 - Dhejne et al. (**2011**), Long-Term Follow-Up of Transsexual Persons Undergoing Sex Reassignment Surgery: Cohort Study in Sweden, PLOS ONE 6(2) e16885 ("Long Term"); See also, R. K. Simonsen et al. (2016), Long-Term Follow-Up of Individuals Undergoing Sex Reassignment Surgery: Psychiatric Morbidity & Mortality, Nordic J. of Psychiatry 70(4). Swedish follow-up study of patients who underwent sex-reassignment surgery over a 30-year periodfound a *suicide rate in the post-Sex Reassignment Surgery (SRS) population 19.1 times greater* — after affirmation treatment — than that of the controls; both studies demonstrated elevated mortality rates from medical and psychiatric conditions.

psychiatric conditions.

2021-2020 Carmichael P, Butler G, Masic U, et al. Short-term outcomes of pubertal suppression in a selected cohort of 12 to 15 year old young people with persistent gender dysphoria in the UK. medRxiv 2020.12.01.20241653 ... Self-harm did NOT improve and "no changes in psychological function," meaning no improvement. (Also, "YSR [Youth Self Report] data at 36 months (n = 6) were not analyzed."... no significant effect on their psychological function, thoughts of self-harm, or body image, a study has found... children experienced reduced growth in height and bone strength by the time they finished their treatment at age 16. The findings, from a study of 44 children treated by the Gender Identity Development Service (GIDS) run by the Tavistock and Portman NHS Foundation Trust in London, have emerged as the trust prepares to appeal against a High Court ruling that led NHS England to pause referrals of under 16s for puberty blockers.

See, 2020 Bränström and Panchankis long term surgical results NO benefit (data

suggests and suggests an increased risk of serious suicide attempts) ...See also See, Kalin, N.H., Reassessing Mental Health Treatment Utilization Reduction in Transgender Individuals After Gender-Affirming Surgeries: A Comment by the Editor on the Process by the Editor-in-Chief The American Journal of Psychiatry, Am J Psychiatry 2020; 177:7 64; doi: 10.1176/appi.ajp.2020.20060803; See also, Anckarsäter, H., (MD, Ph.D.) and Gillberg, C., (M.D., Ph.D.) Methodological Shortcomings Undercut Statement in Support of Gender-Affirming Surgery, Am J Psychiatry 2020; 177:764–765; doi: 10.1176/appi.ajp.2020.19111117.

DEMOGRAPHICS... no biological explanation... The radical change in patient demographics from early onset in boys to teen girls with rapid onset— has been termed late-, adolescent-, or rapid-onset gender dysphoria — has now been seen in every gender clinic in the western world, and there has been a huge surge in the number of cases. "National College Health Assessment: ACHA-NCHA s://www.acha.org/NCHA/ACHA-NCHA Data/Publications and Reports/NCHA/Data/Publications and Reports.aspx? hkey=d5fb767c-d15d-4efc-8c41-3546d92032c5 See, Kaltiala-Heino, Riittakerttu, Hannah Bergman, Marja Työläjärvi, and Louise Frisen. "Gender Dysphoria in Adolescence: Current Perspectives." Adolescent Health, Medicine and Therapeutics Volume9 (March 2018): 31-41. https://doi.org/10.2147/AHMT.S135432 See, Vries, Annelou L.C. de. "Challenges in Timing Puberty Suppression for Gender-Nonconforming Adolescents." Pediatrics 146, no. 4 (October 2020): e2020010611. https://doi.org/10.1542/peds.2020-010611. See, Zucker, Kenneth J. "Adolescents with Gender Dysphoria: Reflections on Some Contemporary Clinical and Research Issues." Archives of Sexual Behavior 48, no. 7 (October 2019): 1983–92. https://doi.org/ 10.1007/s10508-019-01518-8. and reportedly Australia.

2020 See National Review for Great Britain (NICE), Deborah Cohen and Hannah Barnes, Evidence for puberty blockers use very low, says NICE at https://www.bbc.com/news/health-56601386 ["The evidence for using puberty blocking drugs to treat young people struggling with their gender identity is "very low", an official review has found. The National Institute of Health and Care Excellence (NICE) said existing studies of the drugs were small and "subject to bias and confounding".;

See, Asscheman H, Giltay EJ, Megens JA, et al. A long-term follow-up study of mortality in transsexuals receiving treatment with cross-sex hormones. Eur J Endocrinol. 2011;164:635-642. "There is no evidence that transition reduces suicide when we look past 10 years, and there is some suggestion that suicide rates may actually increase after the transition honeymoon phase is over;" says Malone, stressing the importance of providing proper evaluation and appropriate psychological treatment for any suicidal tendencies. (Supports the Branson conclusions after recantation and correction).

Sweden = Review of Gender dysphoria in children and adolescents: an inventory of the literature, SBU Policy Support no 307, 2019 www.sbu.se/en • registrator@sbu.se Contact SBU: Jan Adolfsson, Medical Advisor, Project Manager, jan.adolfsson@sbu.se,

English Proofreading: Project group and Jan Adolfsson, SBU ["No relevant randomized controlled (treatment outcome) trials in children and adolescents were found."] ; See, also e.g., FINLAND Issues Strict Guidelines for Treating Gender Dysphoria at https://genderreport.ca/finland-strict-guidelines-for-treating-gender-dysphoria/. In 2020, Finland reportedly became the first country in the world to issue new guidelines for this group of patients when it concluded similarly to the UK High Court that there is a lack of quality evidence to support the use of hormonal interventions in adolescents with gender dysphoria.... they also issued the guideline ordering "No surgical interventions are allowed for children under the age of 18".). As the *methodological quality of the studies was already poor* based on the type of study, thus no actual quality assessment or determination of the degree of evidence was performed."] ;

See, Cochrane Review (See, Haupt, C., Henke, M. et. al., <u>Cochrane Database of Systematic Reviews</u> Review - Intervention, Antiandrogen or estradiol treatment or both during hormone therapy in transitioning transgender women, 28 November 2020.)

See, Griffin, L., Clyde, K., Byng, R., Bewley, S., Sex, gender and gender identity: a reevaluation of the evidence. BJPsych Bulletin (2020) doi:10.1192/bjb.2020.73, Cambridge University Press, 21 July 2020, the authors noted the hazardous error of mandating "affirmation treatments" — thus requiring the negligent practice of Confirmation Bias — rather than properly and carefully exploring alternative hypotheses — the standard, required ethical, medical standard of practice. ... As Griffin discussed, "Attempts to properly explore, formulate and treat coexisting mental illness in gender dysphoric populations, including that relating to childhood trauma, might be considered tantamount to 'conversion therapy'. Although mental illness is overrepresented in the trans population it is important to note that gender nonconformity itself is not a mental illness or disorder. As there is evidence that many psychiatric disorders persist despite positive affirmation and medical transition, it is puzzling why transition would come to be seen as a key goal rather than other outcomes, such as improved quality of life and reduced morbidity. When the phenomena related to identity disorders and the evidence base are uncertain, it might be wiser for the profession to admit the uncertainties. Taking a supportive, exploratory (psychotherapy) approach with gender-questioning patients should not be considered conversion therapy."... In addition, Griffin et al wrote: "Transgender support groups have emphasized the risk of suicide. After controlling for coexisting mental health problems, studies show an increased risk of suicidal behaviour and self-harm in the transgender population, although underlying causality has not been convincingly demonstrated.

See, Dyer, C., Puberty blockers do not alleviate negative thoughts in children with gender dysphoria, finds study BMJ 2021; 372 doi: https://doi.org/10.1136/bmj.n356 (Published 08 February 2021) Cite this as: BMJ 2021;372:n356 [Puberty blockers used to treat children aged 12 to 15 who have severe and persistent gender dysphoria had no significant effect on their psychological function, thoughts of self-harm, or body image, a study has found. However, as expected, the children experienced reduced growth in height and bone strength by the time they finished their treatment at age 16]

See, e.g., Wold, A. (M.D., Ph.D.) Gender-Corrective Surgery Promoting Mental Health in Persons With Gender Dysphoria Not Supported by Data Presented in Article, Am J Psychiatry 2020; 177:768; doi: 10.1176/appi.ajp.2020.19111170. [among the individuals examined in the Branstrom study, the risk of being hospitalized for a suicide attempt was 2.4 times HIGHER if they had undergone gender-corrective surgery than if they had not.... the data presented in the Branstrom article do not support the conclusion that surgery is beneficial to mental health in individuals with gender dysphoria."] "Therefore, ... the data in the article ... *OVERTURNS the authors' stated conclusions, suggesting that sex reassignment surgery is in fact associated with INCREASED mental health treatment* See, Ring, A. (PhD) and Malone, W., Confounding Effects on Mental Health Observations After Sex Reassignment Surgery, Am J Psychiatry 2020; 177:768–769; doi: 10.1176/appi.ajp.2020.19111169.

See, See, Van Mol, A., , Laidlaw, M. K., Grossman, M., McHugh, P. , Gender-Affirmation Surgery Conclusion Lacks Evidence, Am J Psychiatry 177:8, August 2020 ajp.psychiatryonline.org 765. "The study confirms the strong association between psychiatric morbidity and the experience of incongruity between gender identity and biological sex. However, the study does NOT demonstrate that either hormonal treatment or surgery has ANY effect on this morbidity. It seems that the main message of this article is that the incidence of mental health problems and suicide attempts is especially HIGH in the year AFTER the completion of gender-affirming surgery [It is telling that the authors some how ignored this most essential finding] ..." See, Curtis, D. (M.D., Ph.D.), Study of Transgender Patients: Conclusions Are Not Supported by Findings, Am J Psychiatry 2020; 177:766; doi: 10.1176/appi.ajp.2020.19111131.

See, Malone, W. and Roman, S., Calling Into Question Whether Gender-Affirming Surgery Relieves Psychological Distress, Am J Psychiatry 2020; 177:766–767; doi: 10.1176/appi.ajp.2020.19111149. "Bränström and Pachankis study on mental health treatment and suicide attempts ... is misleading because the study design is flawed." "The authors first found what was already known ... the rate of psychiatric morbidity is much higher in persons with gender dysphoria compared with the general population (both before AND after "transitioning"). The authors then explored if the risk for mental health treatment changes as a function of years since starting HORMONAL treatment. They find NO effect (odds ratio = 1.0), but they do find a trend toward INCREASED risk of suicide attempts as a function of years since starting [gender affirmation] HORMONAL treatment. They somehow failed to publish this essential finding.

See, Landén, M. (M.D., Ph.D.) The Effect of Gender-Affirming Treatment on Psychiatric Morbidity Is Still Undecided, Am J Psychiatry 2020; 177:767–768; doi: 10.1176/appi.ajp.2020.19111165. this conclusion is not supported by the data presented in the article.

See, Bränström, R. and Pachankis, J., Toward Rigorous Methodologies for Strengthening Causal Inference in the Association Between Gender-Affirming Care and Transgender Individuals' Mental Health: Response to Letters, Am J Psychiatry 2020; 177:769–772; doi: 10.1176/appi.ajp.2020.20050599.

^{2020 -} Sweden, following a national review of transgender science, <u>published a new guideline</u> that is NOT consistent with WPATH protocols nor the opinions of Drs Schechter and Brown in this case. [https://genderreport.ca/finland-strict-guidelines-

for-treating-gender-dysphoria/ The SWEDISH NATIONAL GUIDELINES appear quite contrary to the opinions of Drs Brown and Schechter and WPATH.

2020 - Finland following a review of transgender science, became the first country in the world to issue new guidelines for this group of patients when it concluded similarly to the UK High Court that there is a lack of quality evidence to support the use of hormonal interventions in adolescents with gender dysphoria. This new Finnish guidance prioritizes psychological therapy over treatment with hormones or surgery and suggests different care plans for early-onset vs late-onset childhood gender dysphoria. The 2020 Finland guidelines state "Only limited research has been conducted on transgender identity and other gender identity conflicts, and comparative studies are very rare."] The Finland National Guidelines appear quite contrary to the opinions of Drs Brown and Schechter and WPATH.

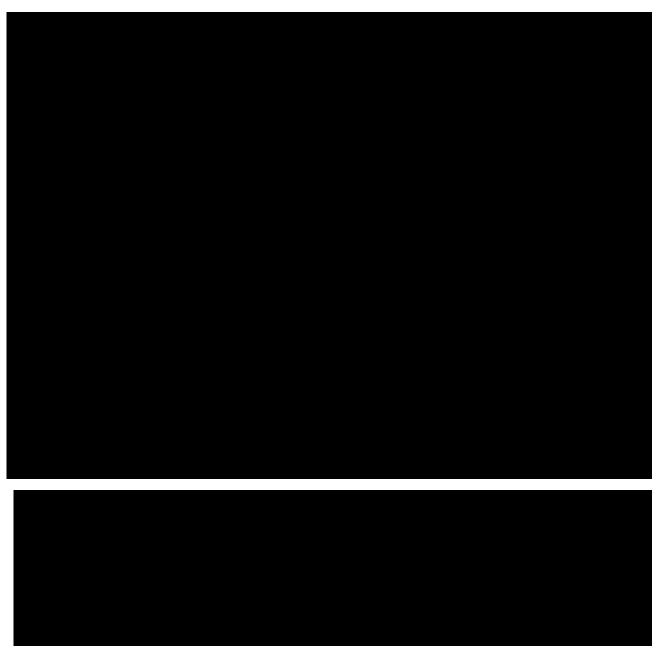
See, https://genderreport.ca/finland-strict-guidelines-for-treating-gender-dysphoria/Finland Clinical Guidelines and Conclusions Three reports were created by COHERE in Finland. The report "Medical treatment methods for dysphoria associated with variations in gender identity in minors – recommendation" clarifies the roles of different healthcare providers in a situation where a minor is uncertain about their gender identity. They also produced general recommendations for the treatment of transgender people, which applies to adults. And interestingly, a third and separate set of recommendations for the treatment of gender dysphoria related to non-binary people and people with gender identities other than opposite-sex gender identities. The summaries are available for download here:

Summary-transgender enDownload Summary minors enDownload Summary non-binary enDownload

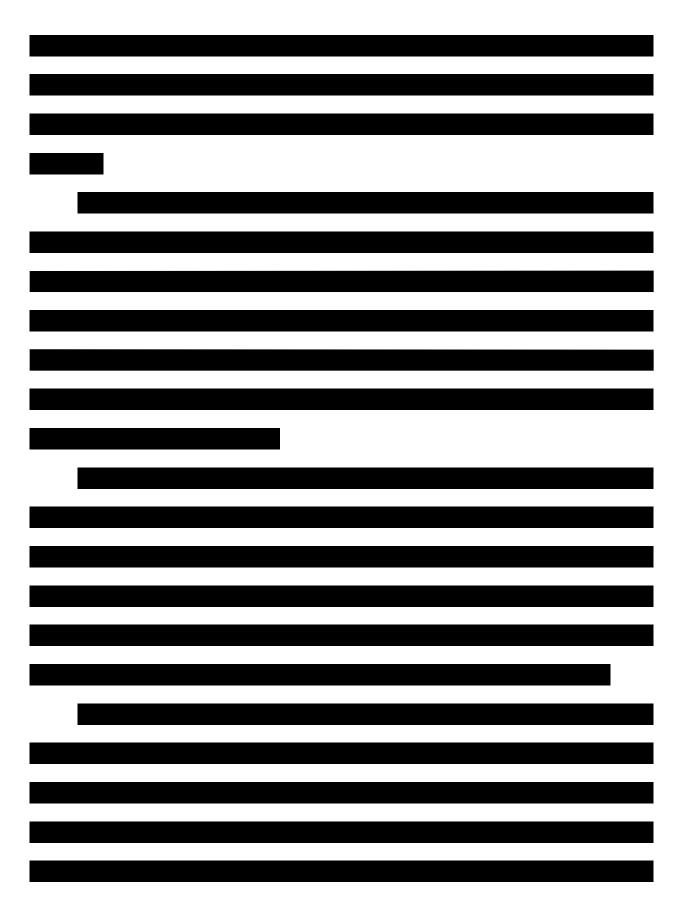
as in all expert witness reports — subject to the limitations of documentary and related evidence, the impossibility of absolute predictions, as well as the limitations of social, biological, and medical science. All opinions have been offered to a reasonable degree of medical certainty. I have not met with, nor personally interviewed, anyone in this case. As always, I have no expert opinions regarding the veracity of witnesses in this case. I have not yet reviewed all of the evidence in this case and my opinions are subject to change at any time as new information becomes available to me. Only the trier of fact can determine the credibility of witnesses and how scientific research may or may not be related to the specific facts of any particular case. In

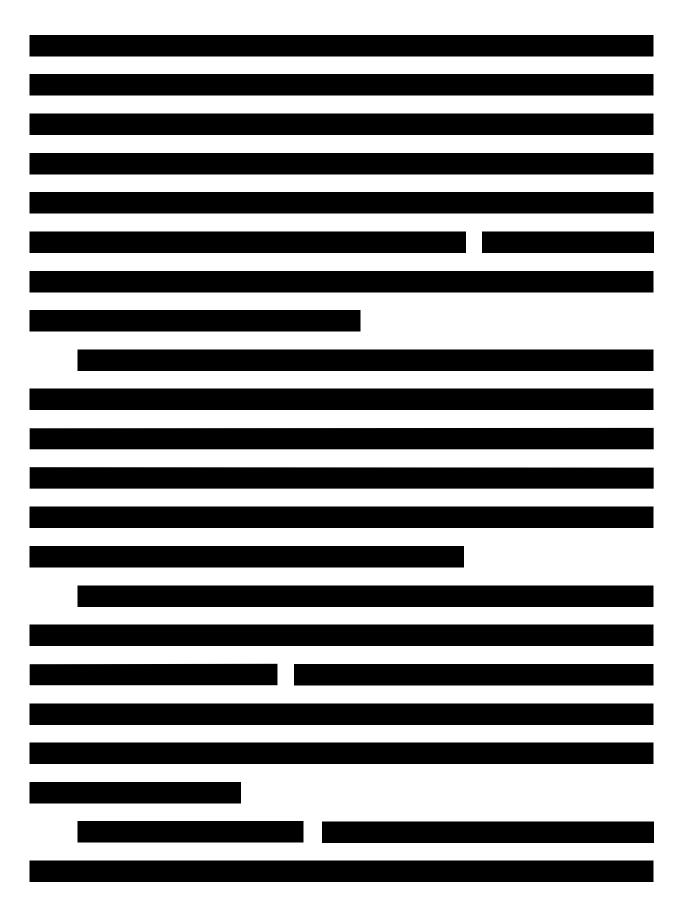
my opinion, a key role of an expert witness is to help the court, lawyers, parties, and the public understand and apply reliable scientific, technical, and investigative principles, hypotheses, methods, and information. I have transmitted this confidential expert report directly to attorney John G. Knepper, J.D. for distribution as consistent with the laws of the appropriate jurisdiction for this case.

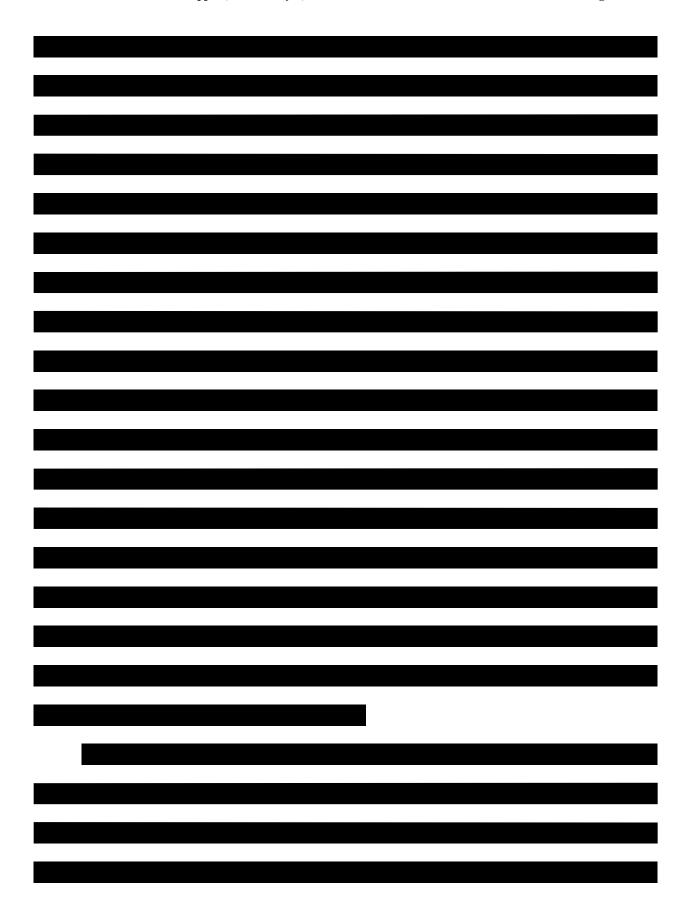
CONFIDENTIAL INFORMATION SECTION BELOW

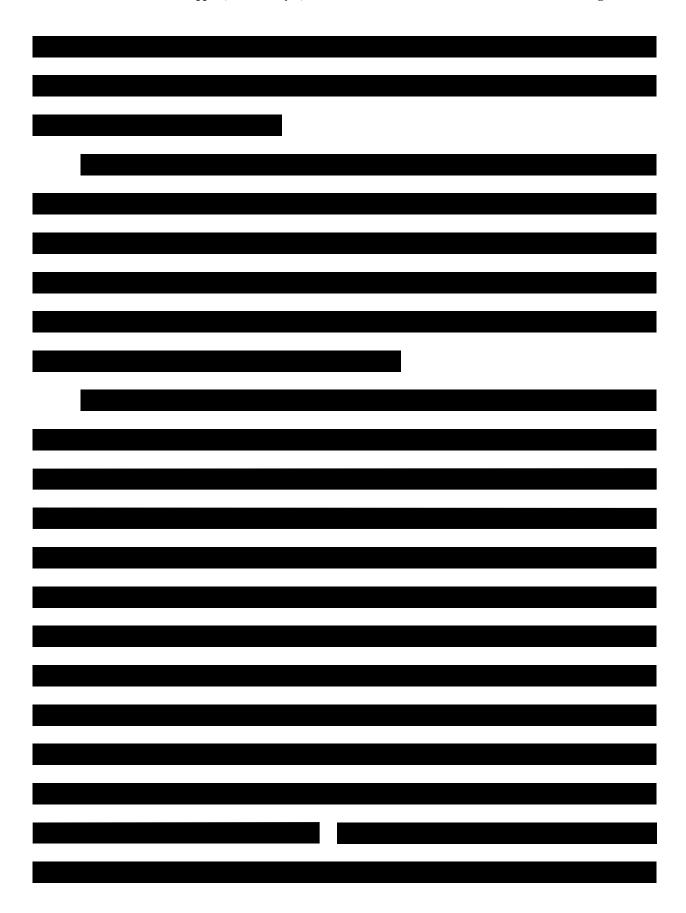


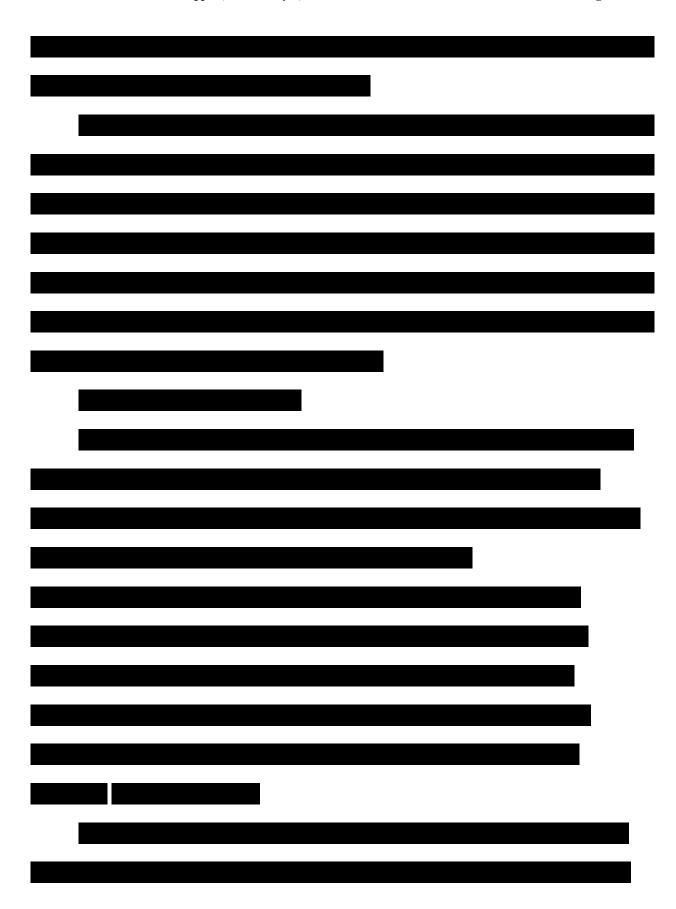




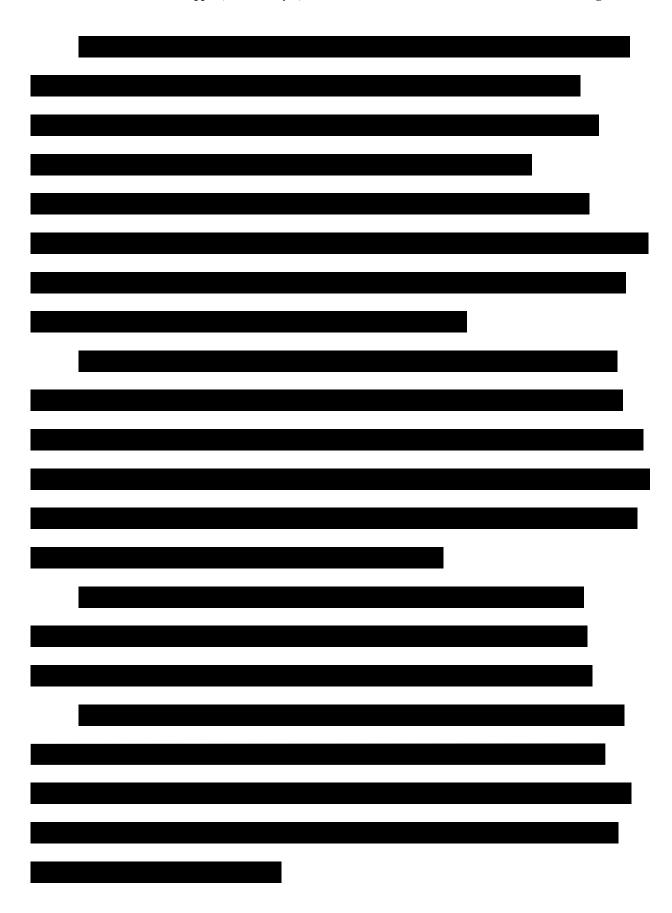












Pursuant to 28 U.S.C § 1746, I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Date:

Signed: May 1, 2021

Patrick W. Lappert, MD